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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,677	10/22/2003	Neil M. Wolfman	08702.0093-00000	2405
60949 7590 11/19/2007 WYETH/FINNEGAN HENDERSON, LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER DUTT, ADITI	
			ART UNIT	PAPER NUMBER
			1649	
			MAIL DATE	DELIVERY MODE
			11/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/689,677

Applicant(s)

WOLFMAN ET AL.

Examiner

Aditi Dutt

Art Unit

1649

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 August 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 05 November 2007. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): 112, 1st paragraph, written description.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-5, 10-17, 23, 29-35, 40 and 41.
Claim(s) withdrawn from consideration: 25, 26, 38, 39.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See attached sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

Continuation of 11: Does not place the application for condition of allowance because:

Enablement, 112 first paragraph

The rejection of claims 1-5, 10-17, 23, 29-37 under 35 U.S.C. 112, first paragraph, are applied to amended claims 1-5, 10-17, 23, 29-35, 40-41, for reasons of record in the the previous Office Action dated 4 May 2007.

Applicant's arguments with respect to claims 1-5, 10-17, 23, 29-35 are not persuasive, because the specification is not enabled for the increasing of muscle mass in an individual with any disorder requiring the increase in muscle mass, such as Duchenne muscular dystrophy or DMD. Applicants allege that the Examiner has not provided a basis for the invalidation of the Applicant's model of DMD and, therefore, has not met the initial burden of establishing a "reasonable basis to question the enablement provided for the claimed invention". Applicant submits the Yaworsky Declaration and the Ohsawa reference in support of the argument.

Applicant's arguments are considered but are not persuasive, because Applicant had provided a substantial basis for the use of the mdx mouse model for experiments related to DMD in the previous Office Actions (dated 9 November 2006 and 4 May 2007). The mdx mouse model is the model of choice for DMD, a disorder with mutations in the dystrophin gene. The mdx mice do not express the dystrophin gene, like the affected humans. Furthermore, as stated in the Office Action dated 9 November 2006 (page 8, para 16), based on electromyographic studies in mdx and wild type C57 mice, Han et al showed that the motor unit action potentials were normal in wild type C57 muscles, versus abnormal spontaneous potentials and complex repetitive discharges in mdx mice, a finding that is comparable to that observed in the muscles from boys with DMD (Musc Nerve 33: 208-214, 2006; page 211, Fig 2,3; page 212, col 2, page 3).

Yaworsky Declaration

Applicants submit the Yaworsky declaration, whereby it is demonstrated that administration of ActRIIB-Fc fusion protein increased the muscle mass and muscle fiber cross-sectional area in mice having dexamethasone induced muscular atrophy.

Applicant's declaration is considered, but not found to be persuasive, because although ActRIIB-Fc fusion protein may be effective in increasing the muscle mass in the dexamethasone induced muscle atrophy mouse model, it is not enabled for increasing the muscle mass in an individual with any muscular disorder, in particular complex genetic disorders like DMD. Therefore, the results obtained in the dexamethasone cannot be extrapolated to an individual suffering from DMD with accuracy, primarily because of the basic genetic differences leading to the pathology of DMD (viz. the lack of dystrophin expression in DMD). The declaration is silent on the mdx model or on DMD.

Ohsawa et al.

Applicants submit the Ohsawa reference in support of the enablement of the pending claims. Ohsawa et al. demonstrate significant increase in muscle mass in the limb-girdle muscular dystrophy (LGMD) model by the administration of ActRIIB-Fc fusion protein. However, LGMD is different from DMD, in its severity and genetics of pathology, exhibiting different pathophysiological pathways and different success of treatment. Hence, the model for LGMD is not the right model for increasing muscle mass in an individual with any muscular disorder, such as DMD.

Written description, 112 first paragraph

The rejection of claims 1-5, 10-17, 23, 29-37 under 35 U.S.C. 112, first paragraph, written description, is withdrawn, because of Applicant's arguments that were found to be persuasive, and amendment of claims.